

## **IN THE CLAIMS:**

Please amend the claims as follows:

1. (Currently Amended) A computer-implemented method, embodying a computer program of instructions executable by a computer, for learning consumer behavior, said method comprising:

inputting, to a computer, a shared business opportunity (SBO) tree, wherein said SBO tree comprises:

nodes, each of said nodes corresponding to a customer; and

said nodes representing a hierarchical customer-chain comprising at least one parent-child relation;

loading, by said computer, a node, corresponding to a customer, with an online transaction record between said customer and a merchant;

identifying, by said computer, said node, loaded with said online transaction record, as a customer node;

identifying, by said computer, a parent node of said customer node;

assigning, by said computer, transaction data, loaded in said customer node, to said parent node,

wherein said transaction data comprises online transaction records between said customer and said merchant, and

wherein said transaction data relates to consumer behavior;

setting, by said computer, said parent node equal to a new customer node;

if said new customer node is not a root node of said SBO tree, then identifying, by said computer, a new parent node of said new customer node and assigning transaction data, loaded in said new customer node, to said new parent node, otherwise analyzing, by said merchant, transaction data of all descendents of said new customer node in said SBO tree; and

selecting, by said merchant, at least one of products and promotional tools to be presented, by said computer, online to a customer, corresponding to said new customer node,

based on said analyzing transaction data relating to consumer behavior of said all descendents of said new customer node.

2-5. (Canceled).

6. (Previously Presented) The method of claim 1, wherein said transaction data further comprises any of:

- demographics related to said customer; and
- acquaintances related to said customer.

7. (Previously Presented) The method of claim 1, wherein said promotional tools comprise any of:

- discount coupons valid for a particular category of items offered by said merchant;
- gift certificates valid for a particular category of items offered by said merchant; and
- freebies valid for a particular category of items offered by said merchant.

8. (Previously Presented) The method of claim 1, wherein said selecting at least one of said promotional tools for a product comprises any of:

- correlation analysis;
- collaborative filtering; and
- associative learning.

9. (Previously Presented) The method of claim 1, wherein said analyzing transaction data comprises any of:

- determining pricing for products;
- performing market segmentation of said customers;
- identifying preferences of said customers;
- performing marketing targeted at an identified market segment; and
- maximizing potential success of a promotional tool.

10. (Previously Presented) The method of claim 1, wherein said customer is provided incentives to acquire descendants.

11-12. (Canceled).

13. (Previously Presented) A computer system for learning consumer behavior, said system comprising:

a memory that stores an inputted shared business opportunity (SBO) tree, wherein said SBO tree comprises:

nodes, each of said nodes corresponding to a customer; and

said nodes representing a hierarchical customer-chain comprising at least one parent-child relation; and

a processor configured to:

load a node, corresponding to a customer, with an online transaction record between said customer and a merchant;

identify said node, loaded with said online transaction record, as a customer node;

identify a parent node of said customer node;

assign transaction data, loaded in said customer node, to said parent node,

wherein said transaction data comprises online transaction records between said customer and said merchant, and

wherein said transaction data relates to consumer behavior;

set said parent node equal to a new customer node;

if said new customer node is not a root node of said SBO tree, then identify a new parent node of said new customer node and assign transaction data, loaded in said new customer node, to said new parent node, otherwise analyze, by said merchant, transaction data of all descendants of said new customer node in said SBO tree; and

select, by said merchant, at least one of products and promotional tools to be presented to a customer, corresponding to said new customer node, based on said analyzing of

transaction data, corresponding to consumer behavior of said all descendents of said new customer node.

14-17. (Canceled).

18. (Previously Presented) The system of claim 13, wherein said transaction data further comprises any of:

- demographics related to said customer; and
- acquaintances related to said customer.

19. (Previously Presented) The system of claim 13, wherein said promotional tools comprise any of:

- discount coupons valid for a particular category of items offered by said merchant;
- gift certificates valid for a particular category of items offered by said merchant; and
- freebies valid for a particular category of items offered by said merchant.

20. (Previously Presented) The system of claim 13, wherein said selecting at least one of said promotional tools for a product comprises any of:

- correlation analysis;
- collaborative filtering; and
- associative learning.

21. (Previously Presented) The system of claim 13, wherein said said analyzing transaction data comprises any of:

- determining pricing for products;
- performing market segmentation of said customers;
- identifying preferences of said customers;
- performing marketing targeted at an identified market segment; and
- maximizing potential success of a promotional tool.

22. (Previously Presented) The system of claim 13, wherein said said customer is provided incentives to acquire descendents.

23-24. (Canceled).

25. (Previously Presented) A computer program storage device readable by machine, tangibly embodying a computer program of instructions executable by said machine to perform a computer-implemented method for learning consumer behavior, said method comprising:

inputting a shared business opportunity (SBO) tree, wherein said SBO tree comprises:

nodes, each of said nodes corresponding to a customer; and

said nodes representing a hierarchical customer-chain comprising at least one parent-child relation;

loading a node, corresponding to a customer, with an online transaction record between said customer and a merchant;

identifying said node, loaded with said online transaction record, as a customer node;

identifying a parent node of said customer node;

assigning transaction data, loaded in said customer node, to said parent node,

wherein said transaction data comprises online transaction records between said customer and said merchant, and

wherein said transaction data relates to consumer behavior;

setting said parent node equal to a new customer node;

if said new customer node is not a root node of said SBO tree, then identifying a new parent node of said new customer node and assigning transaction data, loaded in said new customer node, to said new parent node, otherwise analyzing, by said merchant, transaction data of all descendents of said new customer node in said SBO tree; and

selecting, by said merchant, at least one of products and promotional tools to be presented online to a customer, corresponding to said new customer node, based on said analyzing transaction data relating to consumer behavior of said all descendents of said new customer

node.

26-29. (Canceled).

30. (Previously Presented) The computer program storage device of claim 25, wherein said transaction data further comprises any of:

- demographics related to said customer; and
- acquaintances related to said customer.

31. (Previously Presented) The computer program storage device of claim 25, wherein promotional tools comprise any of:

- discount coupons valid for a particular category of items offered by said merchant;
- gift certificates valid for a particular category of items offered by said merchant; and
- freebies valid for a particular category of items offered by said merchant.

32. (Previously Presented) The computer program storage device of claim 25, wherein said selecting at least one of said promotional for a product comprises any of:

- correlation analysis;
- collaborative filtering; and
- associative learning.

33. (Previously Presented) The computer program storage device of claim 25, wherein said analyzing transaction data comprises any of:

- determining pricing for products;
- performing market segmentation of said customers;
- identifying preferences of said customers;
- performing marketing targeted at an identified market segment; and
- maximizing potential success of a promotional tool.

34. (Previously Presented) The computer program storage device of claim 25, wherein said customer is provided incentives to acquire descendents.

35-36. (Canceled).